

CHAPTER 3

THE SUNNAH IN REALITY REQUIRES “CERTAINTY”: THE LEGAL CAUSE IS THE “COMING OF RAMADAN”

Traditionally it has been argued that naked-eye sighting is the cause (*sabab*) and that Ramadan can be determined only by fulfilling it, and that the prophetic reports established only two methods to suitable methods of attaining certainty in this matter: naked-eye sighting or completing thirty days (*ikmāl*). However, one question remains: is naked-eye sighting a precondition for starting Ramadan immediately after 29 Sha‘ban only or it is also a requirement on 30 Sha‘ban?

It is generally agreed that naked-eye sighting is not required in the latter case. In fact, many Muslim countries announce that Ramadan will start on the thirty-first day if the new moon has not been sighted on the twenty-ninth day of the month. Looking for the actual moon on the thirtieth day is only a recommended *sunnah*. This entire debate regarding naked-eye sighting as a prerequisite to fasting or not fasting is related only to the twenty-ninth day of the month. Consequently, such a sighting could be a legal reason for starting to fast after 29 Sha‘ban, not 30 Sha‘ban, for the cause and effect go hand in hand. The prophetic hadith requiring the completion of thirty days comes into effect *only if the skies are cloudy*.

In other words, if naked-eye were the sole cause of starting or ending Ramadan, then this cause would have been required on both 29 Sha‘ban and 30 Sha‘ban. As the latter is not the case we can conclude that certainty, not naked-eye sighting, of Ramadan’s arrival is a precondition for the fast. In addition, it can be surmised that the prophetic traditions dealing with naked-eye sighting are concerned primarily with starting or ending the month on 29 Sha‘ban. Had they been connected with fasting after 30 Sha‘ban, then naked-eye sighting would have been required even on the evening of that particular day.

Mokhtar Maghraoui argues that “do not fast until you see the new moon” is categorical in demanding that sighting and only sighting is the sole means to ascertain the beginning of the month.¹ But why would the Prophet insist upon naked-eye sighting as the condition for fasting only on the evening of 29 Sha‘ban but not on the following evening? If it were intrin-

sically obligatory to do so, it would have been required on both days. A binding legal cause cannot be established as a prerequisite objective for only one day of the month and not the other day. The cause and effect go hand in hand in all situations, as Abu Ishaq al-Shatibi has stated.

ما أثبت سبباً، فهو سبب أبداً لا يرتفع...²

The established [legal] cause always remains the cause and never changes.

On the other hand, if we establish certainty about the new month's arrival as the real reason for the prophetic insistence upon naked-eye sighting on 29 Sha^hban, we can fully understand why he did not require it on the evening of the following day. It is also very important to understand this prophetic insistence within the context of the challenges and confusion caused by arbitrary intercalations and illiteracy.

Rashid Rida has observed this fact in quote given below: the Lawgiver requires naked-eye sighting as a means to determine the sacred timings fixed for acts of worship (e.g., Ramadan), not to worship the act of sighting in itself. The Prophet referred to naked-eye sighting and completion of thirty days because the Ummah was unlettered. The objective of his prophethood was to bring the Ummah out of its unlettered state, not to push it further into illiteracy.

(العلم بهذه الأوقات، وليس التعمد برؤية الهلال... وما ذكره صلى الله عليه وسلم من نوط إثبات الشهر برؤية الهلال أو اكتمال العدة بشرطه، قد علله بكون الأمة في عهده كانت أمية، ومن مقاصد بعثته إخراجها من الأمية لا إبقاؤها فيها...)³

The Lawgiver's intent is the knowledge of these timings and not worship through moon sighting ... The Prophet had connected confirmation by actual moonsighting or completion with the condition that the Ummah was unlettered during his times. The goal of his prophethood has been to bring the Ummah out of its unlettered status and not to continue sustaining it.

HADITHS ON SIGHTING THE MOON

I now turn to the original texts of the prophetic injunctions (hadiths) already mentioned, many of which clearly command Muslims to start and end Ramadan via naked-eye sighting. They must be understood in the light of our recent discussion, namely, that the Prophet emphasized this

method in an effort to restore the lunar calendar to its original form. The pre-Islamic Arabs fixed these months with the help of artificial intercalations to harmonize them with their solar calendar solely for their own benefit. The Prophet commands:

حَدَّثَنَا آدَمُ حَدَّثَنَا شُعْبَةُ حَدَّثَنَا مُحَمَّدُ بْنُ زَيْدٍ قَالَ: سَمِعْتُ أَبَا هُرَيْرَةَ رَضِيَ اللَّهُ عَنْهُ يَقُولُ: قَالَ النَّبِيُّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ — أَوْ قَالَ: قَالَ أَبُو الْقَاسِمِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ — (صُومُوا لِرُؤُوسِهِ وَأَفْطِرُوا لِرُؤُوسِهِ، فَإِنْ غُمِّيَ عَلَيْكُمْ فَأَكْمَلُوا عِدَّةَ شَعْبَانَ ثَلَاثِينَ).⁴

The Prophet said, “Fast on sighting it [the new moon] and break the fast on sighting it. Complete thirty days of Sha‘ban if it is cloudy.”

وَحَدَّثَنَا عُيَيْدُ اللَّهِ بْنُ مُعَاذٍ. حَدَّثَنَا أَبِي. حَدَّثَنَا شُعْبَةُ عَنْ مُحَمَّدِ بْنِ زَيْدٍ قَالَ: سَمِعْتُ أَبَا هُرَيْرَةَ، رَضِيَ اللَّهُ عَنْهُ يَقُولُ: قَالَ رَسُولُ اللَّهِ (صُومُوا لِرُؤُوسِهِ وَأَفْطِرُوا لِرُؤُوسِهِ، فَإِنْ غُمِّيَ عَلَيْكُمْ الشَّهْرُ فَاعْدُوا ثَلَاثِينَ).⁵

The Prophet said, “Fast on sighting it [the new moon] and break the fast on sighting it. Count thirty days if the month is concealed from you [the sky being cloudy].”

Other narrations use negative formulas to emphasize the same point:

حَدَّثَنَا عَبْدُ اللَّهِ بْنُ مُسْلِمَةَ عَنْ مَالِكٍ عَنْ نَافِعٍ عَنْ عَبْدِ اللَّهِ بْنِ عُمَرَ رَضِيَ اللَّهُ عَنْهُمَا: (أَنَّ رَسُولَ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ ذَكَرَ رَمَضَانَ فَقَالَ: لَا تَصُومُوا حَتَّى تَرَوْا الْهَلَالَ، وَلَا تَفْطِرُوا حَتَّى تَرَوْهُ، فَإِنْ غُمَّ عَلَيْكُمْ فَاقْدُرُوا لَهُ).⁶

The Prophet mentioned Ramadan and said, “Do not fast until you see the moon and do not break the fast until you see it. Estimate it when it is cloudy.”

Imam Ahmad reports the same:

حَدَّثَنَا عَبْدُ اللَّهِ، حَدَّثَنِي أَبِي، حَدَّثَنَا عَبْدُ الرَّحْمَنِ، حَدَّثَنَا مَالِكٌ، عَنْ نَافِعٍ، عَنْ ابْنِ عُمَرَ، عَنِ النَّبِيِّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَ: (لَا تَصُومُوا حَتَّى تَرَوْا الْهَلَالَ، وَلَا تَفْطِرُوا حَتَّى تَرَوْهُ، فَإِنْ غُمَّ عَلَيْكُمْ فَاقْدُرُوا لَهُ).⁷

Do not fast until you see the moon and do not break the fast until you see it. Estimate it when it is cloudy.

THE PROBLEM

Hamza Yusuf, discussing the nature of the problem, observes:

The Islamic calendar is lunar. Lunar calendars follow the phases of the moon, beginning with the crescent moon and ending with the conjunction of the moon and the sun in their respective perceived movements around the earth. The time of one lunation or complete cycle of the moon in a lunar month is approximately 29.5 days. This must be averaged because the moon does not travel at a constant speed nor does it travel in a perfect circle but in an elliptical orbit around the earth. The moon's monthly cycle around the earth varies between 29.2 days and 29.8 days, which means that throughout the year there will be approximately six months in which there are twenty-nine days, and six months in which there are thirty days. The total number of days in a lunar year is approximately 354, which is eleven days shorter than the average solar year. *This results in the lunar year progressing through the fixed solar year rather than beginning and ending at the same time as the solar. In order to make the lunar years consistent with the solar, many pre-Islamic societies intercalated or added days to the lunar months. This enabled them to follow a lunar calendar without having it depart from the fixed seasons of the solar calendar. This was and remains the practice of the Jewish community, which intercalates a thirteenth month every three years in order to align the lunar calendar with the solar. The pre-Islamic Arabs used a lunar calendar but both calculated and intercalated their calendars when suitable for their needs. Their general practice however was to rely on a physical sighting of the crescent.*⁸

He continues,

The Islamic lunar calendar is not to be tampered with, as the Prophet ... prohibited intercalation in his farewell address to his community during the final pilgrimage. Islam condemns intercalation, regarding it as a rejection of the natural order inherent in the perfection of the lunar calendar that God has provided humanity for measuring their time. *For this reason, in a number of hadith that achieve the status of infallible (mutāwatir) and thus on par with the legislative authority of any verse in the Qur'an, the Prophet [s] commanded Muslims to base their month on the physical sighting of the new moon and stipulated that if not seen on the twenty-ninth completed day of the previous month on a clear evening, or if clouds or other atmospheric barriers hindered visibility, then to complete thirty days of the previous month and begin the new month the following sunset, which would mean on the thirty-first day following the previous sighting or a calculation of thirty days.*⁹

Accordingly, it is important to note the following:

First, the prophetic hadith clearly asks for naked-eye sighting as a means of certainty, not as a precondition for fasting. This type of sighting was required by the Prophet only because no other available method could confirm the new moon's presence, the sign of the new month's commencement. As he said: "We are an unlettered people. We neither write nor calculate."

The month sometimes consists of twenty-nine or thirty days. Acts of worship are connected with time, which in Islamic understanding is connected with the moon (not the sun), for the Islamic calendar is lunar. The Shar‘iah does not want us to start fasting before Ramadan has begun or to miss a day of it by celebrating the ‘Id on the last day of Ramadan. That is why the Prophet told us not to start or finish this month a day or two ahead of time, but rather to wait until certainty about the new moon’s arrival has been obtained.

حَدَّثَنَا قُتَيْبَةُ، حَدَّثَنَا أَبُو الْأَحْوَصِ عَنْ سِمَاكِ بْنِ حَرْبٍ عَنْ عِكْرَمَةَ عَنْ ابْنِ عَبَّاسٍ، قَالَ: قَالَ رَسُولُ اللَّهِ (ﷺ) لَا تَصُومُوا قَبْلَ رَمَضَانَ، صُومُوا لِرُؤْيَيْهِ وَأَفْطِرُوا لِرُؤْيَيْهِ، فَإِنْ حَالَتْ دُونَهُ غَيَابَةٌ فَأَكْمِلُوا ثَلَاثِينَ يَوْمًا.¹⁰

Qutaybah narrated from Abu al-Ahwas, from Simak ibn Harb, who reported that ‘Abd Allah ibn ‘Abbas said: “The Prophet said, ‘Do not fast immediately before Ramadan. Start the fast with the sighting of the new moon and break your fast with the sighting of it. If the sky is overcast, then complete thirty days.’”

حَدَّثَنَا عَبْدُ اللَّهِ بْنُ سَعِيدٍ ثَنَا إِسْمَاعِيلُ بْنُ عَلِيٍّ، ثَنَا حَاتِمُ بْنُ أَبِي صَغِيرَةَ، عَنْ سِمَاكِ بْنِ حَرْبٍ، قَالَ: أَصْبَحْتُ فِي يَوْمٍ قَدْ أَشْكَلَ عَلَيَّ مِنْ شَعْبَانَ أَوْ مِنْ شَهْرِ رَمَضَانَ، فَأَصْبَحْتُ صَائِمًا فَأَتَيْتُ عِكْرَمَةَ فَإِذَا هُوَ يَأْكُلُ خَبْزًا وَيَقْلًا، فَقَالَ: هَلَمْ إِلَى الْغَدَاءِ فَقُلْتُ: إِنِّي صَائِمٌ فَقَالَ: أُقْسِمُ بِاللَّهِ لَتَفْطِرَنَّ، فَلَمَّا رَأَيْتَهُ حَلَفَ وَلَا يَسْتَتِنِي تَقَدَّمْتُ فَعَدَّرْتُ وَإِنَّمَا تَسَحَّرْتُ قَبِيلَ ذَلِكَ ثُمَّ قُلْتُ هَاتِ الْآنَ مَا عِنْدَكَ فَقَالَ: حَدَّثَنَا ابْنُ عَبَّاسٍ قَالَ: قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ: (صُومُوا لِرُؤْيَيْهِ وَأَفْطِرُوا لِرُؤْيَيْهِ، فَإِنْ حَالَ بَيْنَكُمْ وَبَيْنَهُ سَحَابٌ فَكَمَلُوا الْعِدَّةَ ثَلَاثِينَ، وَلَا تَسْتَقْبِلُوا الشَّهْرَ اسْتِقْبَالًا).¹¹

Simak ibn Harb reported: “I woke up one day feeling confused as to whether the day was [the last] day of Sha‘ban or [the first of] Ramadan, so I started the day fasting. Then I went to ‘Krimah and saw him eating bread and herbs. He said, ‘Come and have lunch with me,’ so I told him I was fasting. Thereupon he said, ‘I swear by Allah that you must break your fast.’ When I saw him swearing without making any exception, I went forward and asked for his proof. He said that Ibn ‘Abbas reported that the Prophet said, “Fast by sighting it [the new moon], and break your fast by sighting it. Complete thirty days if it is cloudy, and do not immediately fast before the month [of Ramadan] starts.”

حَدَّثَنَا مُحَمَّدُ بْنُ الصَّبَّاحِ الْبَرْزِيُّ أَخْبَرَنَا جَرِيرُ بْنُ عَبْدِ الْحَمِيدِ الصَّبَّيُّ عَنْ مَنْصُورِ بْنِ الْمُعْتَمِرِ عَنْ رَبِيعِ بْنِ جَرَّاحٍ عَنْ حَدِيثِهِ، قَالَ: قَالَ رَسُولُ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ: (لَا تَقْدَمُوا الشَّهْرَ حَتَّى تَرَوْا الْهَلَالَ أَوْ تُكْمِلُوا الْعِدَّةَ ثُمَّ صُومُوا حَتَّى تَرَوْا الْهَلَالَ أَوْ تُكْمِلُوا الْعِدَّةَ). قَالَ أَبُو دَاوُدَ: رَوَاهُ سُفْيَانُ وَغَيْرُهُ عَنْ مَنْصُورِ بْنِ رَبِيعٍ عَنْ رَجُلٍ مِنْ أَصْحَابِ النَّبِيِّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ لَمْ يُسَمَّ حَدِيثُهُ.¹²

On the authority of Hudhayfah, who reported that the Prophet said, “Do not fast a day or two before Ramadan until you see the new moon or complete thirty days [of Sha‘ban]. Then fast until you see the moon [of Shawwal] or complete thirty days.” Abu Dawud adds: “This hadith has been narrated by Sufyan and others on the authority of Mansur, who reported it from Rabi‘i from a Companion of the Prophet who was not called Hudhayfah.”

The Prophet stressed naked-eye sighting because it was the only available mechanism for the first Muslims to achieve the required certainty, not because the act of actually sighting was the objective of fasting or of any other act of worship. If this objective can be achieved by a more authentic and precise method, as is the case today (viz., calculations), then replacing naked-eye sighting (which is a probable means of certainty) with a more accurate method based on categorical certainty cannot be considered a deviation from the prophetic command or the Shari‘ah’s objectives.

Second, if naked-eye sighting were such an objective or a prerequisite without which fasting could not begin, then it would have been required even on 30 Sha‘ban. But nobody goes out to see the new moon on 30 Sha‘ban or 30 Ramadan, and no jurist ever required that they do so. Once certainty has been attained by completing thirty days (no Islamic month cannot go beyond thirty days), naked-eye sighting is no longer required and the new month is confirmed because it is known that the new moon must be above the horizon by 30th Sha‘ban.

Third, if it is said that sighting is not required on 30 Sha‘ban because the Prophet said “complete thirty days if it is cloudy,” then I would argue that this prophetic statement means exactly what it says. For example, if the evening of 29 Sha‘ban was clear and yet the new moon was not seen, would not the hadith have required Muslims to see it on 30 Sha‘ban if it were a precondition for fasting? The phrase “if it is cloudy” cannot be applied to a clear sky. If naked-eye sighting were intrinsic to fasting, then it would have been required even on thirtieth day, especially if the new moon had not been seen, not because of some obscurities but because it was still below the horizon. However, if we agree that certainty is the precondition for fasting, then one can understand why naked-eye sighting is required on 29 Sha‘ban but not on 30 Sha‘ban.

Fourth, sighting is not a prerequisite for fasting even on 29 Sha‘ban. If it were, then no Muslim would be allowed to start Ramadan before sighting the new moon on 29 Sha‘ban. But Ibn ‘Umar, along with ‘A’ishah and Asma’ bint Abi Bakr, used to start fasting the next day if it was cloudy on

29 Sha‘ban and the new moon was obscured. They would not fast that day as a optional day of fasting, but as a mandatory day of Ramadan.

This was also the practice of many of the Successors. In fact, Ahmad ibn Hanbal built his jurisprudential school upon the actions of these Companions. This becomes important when we realize that Ibn ‘Umar was the original narrator of many of the hadiths found in the hadith compilations that require naked-eye sighting as a means of fasting as well as requiring Muslims not to fast until they see the moon. For instance, he reports:

حَدَّثَنَا عَبْدُ اللَّهِ بْنُ مَسْلَمَةَ عَنْ مَالِكٍ عَنْ نَافِعٍ عَنْ عَبْدِ اللَّهِ بْنِ عُمَرَ رَضِيَ اللَّهُ عَنْهُمَا: (أَنَّ رَسُولَ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ ذَكَرَ رَمَضَانَ فَقَالَ: لَا تَصُومُوا حَتَّى تَرَوْا الْهَلَالَ، وَلَا تُفْطِرُوا حَتَّى تَرَوْهُ، فَإِنْ غُمَّ عَلَيْكُمْ فَاقْدُرُوا لَهُ).¹³

The Prophet mentioned Ramadan and said, “Do not fast until you see the moon and do not break the fast until you see it. Estimate it when it is cloudy.”

حَدَّثَنَا عَبْدُ اللَّهِ، حَدَّثَنِي أَبِي، حَدَّثَنَا عَبْدُ الرَّحْمَنِ، حَدَّثَنَا مَالِكٌ، عَنْ نَافِعٍ، عَنْ ابْنِ عُمَرَ، عَنِ النَّبِيِّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ قَالَ: (لَا تَصُومُوا حَتَّى تَرَوْا الْهَلَالَ، وَلَا تَفْطِرُوا حَتَّى تَرَوْهُ، فَإِنْ غُمَّ عَلَيْكُمْ فَاقْدُرُوا لَهُ).¹⁴

The Prophet mentioned Ramadan and said, “Do not fast until you see the moon and do not break the fast until you see it. Estimate it when it is cloudy.”

‘ABD ALLAH IBN ‘UMAR’S PRACTICE

As we see, Ibn ‘Umar would start Ramadan by counting the days of Sha‘ban and without, actually sighting the new moon if it was cloudy on 29 Sha‘ban. His practice explains the true meanings of such hadiths and repudiates the second most important argument of the majority: that there is a cause and effect relationship between naked-eye sighting and fasting. Logically speaking, sighting in itself cannot be the sole reason for determining Ramadan or the act of fasting. It must be a means to achieve the goal of certainty. The following points must be kept in mind when discussing this question.

Ibn Daqiq al-‘Id, a Shafi‘i authority, states:

وَلَيْسَ حَقِيقَةُ الرُّؤْيَا بِشَرْطٍ مِنَ الرُّؤْمِ؛ لِأَنَّ الْإِتِّفَاقَ عَلَى أَنَّ الْمُحْتَبَسَ فِي الْمَطْمُورَةِ إِذَا عَلِمَ بِإِكْتِمَالِ الْعِدَّةِ، أَوْ بِالِاجْتِهَادِ بِالْأَمَارَاتِ: أَنَّ الْيَوْمَ مِنْ رَمَضَانَ، وَجَبَ عَلَيْهِ الصُّومُ وَإِنْ لَمْ يَرِ الْهَلَالَ. وَلَا أُخْبِرُهُ مَنْ رَأَاهُ.¹⁵

Actual sighting is not a condition for the requirement [of fasting the month of Ramadan]. There is agreement [among the jurists] that if someone were imprisoned in the basement and knew, either by completing thirty days or by diligence [estimation] in following the signs, that the month of Ramadan had started, then he would be required to start fasting even if he had neither sighted the moon himself nor was informed by someone who had actually sighted it.

Interestingly, Hamza Yusuf translates the above quote as follows:

The reason for this is that the actual physical sighting is not what is legally binding, given that it is agreed upon that if someone was confined in a cell and knew by calculation that the [month] had run its course or by attempting to understand the signs that the day was indeed from Ramadan, then it would be incumbent upon him to fast, even if he did not see the crescent and no one informed him that it had been seen.¹⁶

In addition, he indirectly criticizes me for supposedly misunderstanding Ibn Daqiq's original intent:

Sadly, in the papers I examined that used this quote to support calculation, the first half of his quote was omitted, so that his actual position was entirely misrepresented. One paper stated that the imam did not consider sighting to be a condition, when what he is saying is that *physical sighting is not legally binding in the case of one who cannot see the moon*, which is why he uses as an example the man in the cell who has no access to sighting the moon nor to news of anyone who did! In such circumstances, the imam says one can resort to calculating or ijtiḥad.¹⁷

His translation of Ibn Daqiq's statement (the original Arabic is given below) as "The reason for this is that the actual physical sighting is *not what is legally binding*" is confusing.

وَلَيْسَ حَقِيقَةُ الرُّؤْيَا بِشَرْطٍ مِنَ الرُّؤْمِ.

Ibn Daqiq's words clearly state that "actual sighting is not the condition of requiring [fasting]." This supports the Qur'anic and hadith understanding that even those who do not actually see the new moon but are informed of Ramadan's arrival by others should fast, given they are not among those who are exempted (e.g., the sick, travelers, and expectant or nursing mothers). Indeed, requiring naked-eye sighting as a precondition for fasting would exclude from fasting all those who did not actually see the new moon. Such an understanding violates the long-standing Muslim scholarly consensus. Perhaps this is what Ibn Daqiq is stating in his example of a prisoner in the basement or a cell. Had the Shari'ah required

naked-eye sighting as the only condition for starting or ending Ramadan, then that particular person, who would have no access to the outside world and no way to learn about Ramadan's arrival, would not have to fast. And yet the consensus requires such a person to fast based upon personal calculations and following the possible signs.

In consideration of this, what does his statement "One paper stated that the imam did not consider sighting to be a condition, when what he is saying is that *physical sighting is not legally binding in the case of one who cannot see the moon...*" mean? Can physical sighting be legally binding if one cannot see the moon?

Furthermore, in this particular paper I mentioned that Ibn Daqiq opposes the use of calculations to determine Ramadan and 'Id al-Fitr on either 29 Sha'ban or 29 Ramadan, unless there are obscurities. Like many other jurists, he maintains that only two legal causes (*sabab shar'ī*) require fasting: naked-eye sighting and completing thirty days. He differs from others in asserting that calculations can be used to confirm Ramadan if there are obscurities on 29 Sha'ban. This is a legal cause for depending upon calculations. After quoting Mutarrif ibn 'Abd Allah ibn al-Shakhrī and many Shafī'ī juristic authorities as advocating the use of calculations to confirm the month, Ibn Daqiq states:

وَالَّذِي أَقُولُ بِهِ: إِنَّ الْحِسَابَ لَا يُجُوزُ أَنْ يُعْتَمَدَ عَلَيْهِ فِي الصَّوْمِ، لِمَفَارِقَةِ الْقَمَرِ لِلشَّمْسِ، عَلَى مَا يَرَاهُ الْمُنْحَمُونَ، مِنْ تَقَدُّمِ الشَّهْرِ بِالْحِسَابِ عَلَى الشَّهْرِ بِالرُّؤْيَةِ يَوْمٍ أَوْ يَوْمَيْنِ. فَإِنَّ ذَلِكَ إِحْدَاثٌ لِسَبَبٍ لَمْ يُشْرَعْهُ اللَّهُ تَعَالَى.¹⁸

My opinion on this matter is that the astronomical calculations based upon the separation of the moon from the sun cannot be depended upon in fasting because they push forward the month a day or two before the actual sighting. This is introducing a cause (*sabab*) that Allah has not prescribed.

On the other hand, he considers clouds or any other obscurity that hampers naked-eye sighting to be a lawful cause (*sabab shar'ī*) to determine fasting by calculation. The following is the actual text:

وَأَمَّا إِذَا دَلَّ الْحِسَابُ عَلَى أَنَّ الْهَيْلَالَ قَدْ طَلَعَ مِنَ الْإفْقِ عَلَى وَجْهِ يَرَى، لَوْلَا وُجُودُ الْمَانِعِ كَالْعَبَمِ مِثْلًا فَهَذَا يَقْتَضِي الْوُجُوبَ، لِوُجُودِ السَّبَبِ الشَّرْعِيِّ. وَلَيْسَ حَقِيقَةُ الرُّؤْيَةِ بِشَرْطٍ مِنَ اللُّزُومِ؛ لِأَنَّ الْإِتِّفَاقَ عَلَى أَنَّ الْمَحْبُوسَ فِي الْمَطْمُورَةِ إِذَا عَلِمَ بِإِكْمَالِ الْعِدَّةِ، أَوْ بِالِاجْتِهَادِ بِالْأَمَارَاتِ: أَنَّ الْيَوْمَ مِنْ رَمَضَانَ، وَجَبَ عَلَيْهِ الصَّوْمُ وَإِنْ لَمْ يَرَ الْهَيْلَالَ. وَلَا أَنْخَبِرُهُ مِنْ رَأَاهُ.¹⁹

If the calculations show that the new moon is born in the horizon to the extent that it could be seen were it not for obscurities such as clouds, then this makes it obligatory to fast owing to the presence of a lawful Islamic cause. The actual sighting is not a prerequisite of fasting. There is agreement [among the jurists] that if someone was imprisoned in the basement and knew, either by completing thirty days or by diligence in following the signs, that the month of Ramadan has started, then he would be required to observe the fast even if he had neither sighted the moon himself nor been informed by someone who had.

There is a possibility that he intended to state that naked-eye sighting in case of obscurities is not a condition for the obligation to fast. His choice of the given example, however, points more to the fact that naked-eye sighting is not the sole condition for this obligation, but no more than a means to the end of witnessing the month. The Qur'anic meanings of this phrase were analyzed in the previous section.

SIGHTING THE MOON IS NOT A LEGAL REQUIREMENT

Sa'd al-Din Mas'ud ibn 'Umar al-Taftazani, a Hanafi, describes a consensus on the fact that naked-eye sighting is just a means, not the end in itself:

أَنَّ قَوْلَهُ تَعَالَى (فَمَنْ شَهِدَ مِنْكُمُ الشَّهْرَ) مَعْنَاهُ شَاحَدَ الشَّهْرَ فَالشُّهُودُ عِلَّةٌ وَأَيْضًا قَوْلُهُ عَلَيْهِ الصَّلَاةُ وَالسَّلَامُ (صُومُوا لِرُؤْيَيْهِ) يَدُلُّ عَلَى ذَلِكَ إِذْ لَيْسَ الْمَرَادُ حَقِيقَةَ الرُّؤْيَا إِجْمَاعًا بَلْ مَا يَثْبُتُ بِهَا وَهُوَ شُهُودُ الشَّهْرِ.²⁰

The meaning of the Qur'anic verse "whosoever witnesses the month" refers to [a person] witnessing the month [being present in the month]. Consequently, witnessing the month is a cause or *'illah* [of fasting], and the prophetic statement "fast on sighting it" proves this. All Muslim jurists agree that the actual sighting is not meant [here, meaning that it is not the objective], but [that the objective is] what the sighting proves, and that is the witnessing of the arrival of the month.

Mustafa al-Zarqa summarizes this point as follows:

وما دام من البدييات أن رؤية الهلال الجديد ليست في ذاتها عبادة في الإسلام، وإنما هي وسيلة لمعرفة الوقت، وكانت الوسيلة الوحيدة الممكنة في أمة أمية لا تكتب ولا تحسب، وكانت أميتها هي العلة في الأمر بالاعتماد على العين الباصرة، وذلك بنص الحديث النبوي مصدر الحكم.²¹

It is an established fact that sighting the new moon in itself is not an act of Islamic worship. It is just a means to know the time. It was the only way available to a

nation that did not know how to write or calculate. Its unlettered status was the sole reason for it to depend upon the naked eye. This is precisely what the text of the hadith, which is the original source of this ruling [fast on sighting], states.

In conclusion, the Prophet prescribed naked-eye sighting because it was the only method available to his illiterate community that could ensure certainty concerning the beginning or end of a given month.

THE MULTIPLE CONNOTATIONS OF RA'Ā

The verb *ra'ā*, *yarā* or “seeing” or “sighting” is generally used in the hadith quoted above in the sense of naked-eye sighting, although linguistically the verb is not confined to that. Maghraoui, however, states:

The word “seeing” (*ru'yā*) in the second text must be interpreted in its literal (*ḥaqīqī*) sense in accordance with the basic rule in legal hermeneutics: a word must be taken in its literal and not metaphorical (*majāzī*) meaning unless it is impossible to understand it literally and there is a circumstantial reason (*qarīnah*) for assigning it a metaphorical meaning. *It is not impossible to understand ru'yā to mean seeing. The physical sighting of the moon was always the practical understanding of the word ru'yā.*²²

The verb *ra'ā* – *yarā* has been used elsewhere in both the Qur'an and the hadiths where the meanings cannot denote naked-eye sighting but only pondering or certainty. The verb “seeing” and its many derivatives occur in the Qur'an 328 times. In a number of these verses, “seeing” is used in the context of pondering or ascertaining without resorting to naked-eye sighting. Examples of this use can be found in 2:243 and 2:46.

(ألم تر إلى الذين خرجوا من ديارهم وهم ألوف حذر الموت فقال لهم الله موتوا ثم أحياهم إن الله لنؤ فضل على الناس ولكن أكثر الناس لا يشكرون.) (البقرة: 243)

Did you not turn your vision to those who abandoned their homes, though they numbered thousands, for fear of death? Allah said to them: “Die”: then He restored them to life. For Allah is full of bounty to humankind, but most of them are ungrateful. (2:243)

(ألم تر إلى الملا من بني إسرائيل من بعد موسى إذ قالوا لنبي لهم ابعث لنا ملكا نقاتل في سبيل الله.) (البقرة: 246)

Have you not turned your vision to the Chiefs of the Children of Israel after [the time of] Moses? They said to a prophet [that was] among them: “Appoint for us a king, so that we may fight in the cause of Allah.” (2:246)

The same meaning can be understood from 2:258, 3:23, 4:44, 4:49, 4:60, 96:9, 96:13, 107:1, and many more verses. Furthermore, numerous authentic narrations imply the same verb “seeing” with the above-mentioned connotation of “knowing” in relation to fasting Ramadan. In the following agreed-upon hadith, in which the Prophet deploys “seeing” for the night, the actual sighting of the night does not seem to be the objective, for specifying its timings or certainty is more important.

حَدَّثَنَا مُسَدَّدٌ حَدَّثَنَا عَبْدُ الْوَاحِدِ حَدَّثَنَا الشَّيْبَانِيُّ قَالَ: سَمِعْتُ عَبْدَ اللَّهِ بْنَ أَبِي أُوَيْسٍ رَضِيَ اللَّهُ عَنْهُ قَالَ: (سَازِنَا مَعَ رَسُولِ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ وَهُوَ صَائِمٌ، فَلَمَّا غَرَبَتِ الشَّمْسُ قَالَ: انزِلْ فَاجِدْ لَنَا، قَالَ: يَا رَسُولَ اللَّهِ لَوْ أَمْسَيْتَ؟ قَالَ: انزِلْ فَاجِدْ لَنَا، قَالَ: يَا رَسُولَ اللَّهِ إِنَّ عَلَيْكَ مَهَارًا، قَالَ: انزِلْ فَاجِدْ لَنَا، فَتَزَلْ فَاجِدْ، ثُمَّ قَالَ: إِذَا رَأَيْتُمُ اللَّيْلَ أَقْبَلَ مِنْ هَاهُنَا فَقَدْ أَفْطَرَ الصَّائِمُ، وَأَشَارَ بِإِصْبَعِهِ قِبَلَ الْمَشْرِقِ.²³

We traveled with the Prophet while he was fasting. At sunset, he said, “Dismount and mix the drink for us.” He was asked, “What if we wait for the night?” He said, “Prepare the drink.” He was told that it still appeared to be daylight. He again asked for the drink, which was prepared for him. Then he said, “When you see the night approaching from there (and he pointed toward the East), the fasting person should break the fast.”

Muslim clearly reports that this journey was made during Ramadan.²⁴

In these hadiths, the Prophet uses *ra'aytum* in connection with breaking the fast of Ramadan. If we take his statement “If you see the night coming from the East” literally, then we would have to go out every evening to actually see the night coming from the East in order to break our fast. Today nobody does this; all Muslims just follow the clock to determine the time of *ifṭār*. As the Muslims of the Prophet’s time did not have many choices, they adopted the method that would provide the most certainty: looking toward the East and seeing the night approaching as a sign of sunset. Times have changed, however, and no contemporary jurist objects to using a clock. The same principle applies to determining the time of *saḥūr* and *imsāk*:

(وَكُلُوا وَاشْرَبُوا حَتَّى يَتَبَيَّنَ لَكُمُ الْخَيْطُ الْأَبْيَضُ مِنَ الْخَيْطِ الْأَسْوَدِ مِنَ الْفَجْرِ ثُمَّ أَتَمُوا الصِّيَامَ إِلَى اللَّيْلِ... (البقرة: 187))

And eat and drink until the white thread of dawn appears to you distinct from its black thread; then complete your fast till the night appears. (2:187)

Furthermore, for many centuries the Ummah followed the shadow cast by poles to determine the time for *zuhr* and *ʿaṣr*. The Prophet himself advised Muslims to do so. Today we use clocks to determine these times. I am not arguing here that the prayer times are connected with the solar system whereas the time for Ramadan is connected with the lunar system and naked-eye sighting. Rather, I am arguing that although the Qurʾan and the Sunnah require us to differentiate between a white thread and a black thread at dawn to begin our fast or to see the night approaching from the East, we now implement them only in the spirit, not in the letter, because following these specific commands literally has never been the real objective.

For example, the Law ensures that the sun has set and the night has approached before anybody breaks the fast. In the case of *imsāk*, whether dawn had arrived or not had to be ascertained. This objective, which has remained the same throughout Islamic history, can now be achieved by means of clocks because the Ummah does not object to their use in religious matters. These significant matters are, in turn, connected with the obligatory acts of fasting and praying. In other words, the Shariʿah’s objectives are constants, whereas the means vary according to the circumstances. This is the Shariʿah’s true spirit, for such flexibility enables it to keep up with modern developments and progress.

MEANS VERSUS GOALS IN ISLAMIC LAW: DISCUSSION OF THE CONSTANTS AND VARIABLES

Some contemporary Muslims argue that the Shariʿah has also fixed the means to achieve Islamic goals. For instance, lawful (*ḥalāl*) earning is a means to achieve the goal of feeding one’s family, for Muslims are not permitted to steal, cheat, or use some other unlawful means to achieve this goal. Likewise, the objective of fatherhood or generational continuity cannot be achieved by the unlawful means of adultery or fornication.

Abdur Rahman Ijaz asks: “Shouldn’t all the three parts of this equation [be] as important as each other?”

Means - Methods - Achieve Goals

If the goal is to feed the family, then the means and methods employed by the father are highly important. . . If [a] man wants to achieve fatherhood, are [not] the means and methods important, i.e. its due process! Should we accept your new paradigm [that] the achievement of fatherhood is important, then [the] method [itself].²⁵

Feeding the family by stealing or cheating is *haram* because Allah has clearly prohibited such practices. The only alternative or compromise permitted is if the person is facing a life-threatening situation. Becoming a father through unlawful means is also prohibited: “Do not even come close to adultery.” Clearly, any means that are unlawful in and of themselves are prohibited.

The case of naked-eye sighting as a means to start or end Ramadan is quite different. The Qur’an prescribed “witnessing the month” as the cause of fasting. This cause can be understood in light of the prophetic reports demanding either naked-eye sighting or completing thirty days in the case of obscurities on the evening of the twenty-ninth day. The hadith about “estimation” in the case of cloudy weather clearly states another option as a means to determine Ramadan. The fact that there is no requirement for naked-eye sighting on the evening of the thirtieth day gives another authentic means to confirm or negate Ramadan. In sum, the Prophet gave us naked-eye sighting and several other options to achieve the desired goal of certainty.

The Qur’an mentions several kinds of means, among them:

(وَأَعِدُّوا لَهُمْ مَا اسْتَطَعْتُمْ مِنْ قُوَّةٍ وَمِنْ رِبَاطِ الْخَيْلِ تُرْهِبُونَ بِهِ عَدُوَّ اللَّهِ وَعَدُوَّكُمْ وَآخَرِينَ مِنْ دُونِهِمْ لَا تَعْلَمُونَهُمُ اللَّهُ يَعْلَمُهُمْ وَمَا تُنْفِقُوا مِنْ شَيْءٍ فِي سَبِيلِ اللَّهِ يُوَفَّ إِلَيْكُمْ وَأَنْتُمْ لَا تَظْلَمُونَ.)
(الأنفال: 60)

Against them make ready your strength to the utmost of your power, including steeds of war, to strike terror into [the hearts of] the enemies of Allah and your enemies, and others besides, whom you may not know, but whom Allah does know. Whatever you spend in the cause of Allah shall be repaid to you, and you shall not be treated unjustly. (8:60)

Here Allah clearly mentions horses as a means of striking fear into the enemy’s heart. In the following hadith, the Prophet explicitly asks for the use of arrows as a means to achieve the military might needed for self-defense and victory.

حدثنا أبو كريب، قال: ثنا سعيد بن شرحبيل، قال: ثنا ابن لهيعة، عن يزيد بن أبي حبيب، وعبد الكريم بن الحرث، عن أبي عليّ الهمداني، أنه سمع عقبة بن عامر على المنبر يقول: قال الله: وَأَعِدُّوا لَهُمْ مَا اسْتَطَعْتُمْ مِنْ قُوَّةٍ وَمِنْ رِبَاطِ الْخَيْلِ أَلَا وَإِنِّي سَمِعْتُ رَسُولَ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ يَقُولُ عَلَى الْمِنْبَرِ (قَالَ اللَّهُ: وَأَعِدُّوا لَهُمْ مَا اسْتَطَعْتُمْ مِنْ قُوَّةٍ أَلَا أَنَّ الْقُوَّةَ الرَّمِيَّ أَلَا إِنَّ الْقُوَّةَ الرَّمِيَّ) ثَلَاثًا.²⁶

On the authority of Abu Kurayb ... he heard ‘Uqbah ibn ‘Amir recite from the pulpit, “Against them make ready your strength to the utmost of your power, including steeds of war” and then state that he heard the Prophet say, “Certainly [militayr] might consists of archery; certainly [military] might is archery.”

‘Ikrimah maintains that this verse clearly requires Muslims to acquire fortresses and mares as means to achieving this desired might.

حدثنا ابن وكيع، قال: ثنا أبي، عن سفيان، عن شعبة بن دينار، عن عكرمة، في قوله: وأعدوا لهم ما استطعتم من قوة قال: الحصون. ومن رباط الخيل قال: الإناث.²⁷

In modern warfare, Muslims would look stupid and be unable to survive an hour of modern military firepower if they followed the above-mentioned Qur’anic and prophetic means of military might literally. Although these specified means were suitable at that time, such is no longer the case. Therefore, adopting modern means of military might (e.g., tanks, missiles, and combat aircraft) to achieve the desired goals of securing justice and defending Muslims must be considered obligatory. Once again, the goals are constant but the means are variable.

CALCULATIONS AS A MEANS TO ATTAINING CERTAINTY

Likewise, calculations are a means to achieve certainty. The prophetic tradition did not ask for its use for several reasons, such as the practice among the Jews and the pre-Islamic Arabs of fixing calendars by arbitrary intercalations, the Ummah’s almost total illiteracy, the difficulty associated with making calculations, and the undeveloped nature of astronomy at that time. The seemingly most significant reason, which could also be deduced from the authentic prophetic reports, was the Muslims’ almost total illiteracy – something that was also true of the majority of later generations of Muslims. The majority of the classical scholars were right in rejecting the use of calculation to determine Ramadan because its results were inaccurate and mostly computed by immature astrologers and magicians.

In contrast, modern calculations are made by fully qualified scientists and astronomers who base their knowledge on scientific observation and facts. The margin or possibility of error is almost zero. Such arguments of inaccuracy and magic that were used to prevent or prohibit the use of calculations were rejected by Islamic jurists even in classical times. What about twenty-first-century America, where astronomy has reached its climax? Abdillah bin Bayyah observes:

ففي هذا الزمان تطور هذا العلم تطوراً كبيراً، بحيث كما يقول البعض: إن الإبرة اذا ارسلت في الجو يمكن الاهتداء اليها، فكيف القمر الذي يكون قد ولد أو خرج من الاقتران، وخرج من شعاع الشمس.²⁸

The science of [astronomy] has made tremendous progress in our time. Some even say that it can guide us to a needle thrown into space. What about the moon that is born or has moved out of conjunction and from the rays of the sun?

Zayn al-Din ibn Ibrahim ibn Nujaym, a Hanafi, argued in favor of the precise calculations since early times:

نَقَلَ فِي الْأَمْدَادِ عَنِ شَرْحِ الْمُنْظُومَةِ لِابْنِ الشُّحْنَةِ أَنَّ الْمُرَادَ بِالْكَاهِنِ وَالْعَرَّافِ فِي الْحَدِيثِ مَنْ يُخْبِرُ بِالْغَيْبِ أَوْ يَدَّعِي مَعْرِفَتَهُ فَمَا كَانَ هَذَا سَبِيلَهُ لَا يَجُوزُ، وَيَكُونُ تَصْدِيقُهُ كُفْرًا أَمَا أَمْرُ الْأَهْلَةِ فَلَيْسَ مِنْ هَذَا الْقَبِيلِ بَلْ مُعْتَمَدُهُمْ فِيهِ الْحِسَابُ الْقَطْعِيُّ فَلَيْسَ مِنَ الْإِخْتِبَارِ عَنِ الْغَيْبِ أَوْ دَعْوَى مَعْرِفَتِهِ فِي شَيْءٍ أَلَا تَرَى إِلَى قَوْلِهِ تَعَالَى (وَقَدَرَهُ مَنَازِلَ لِتَعْلَمُوا عَدَدَ السِّنِينَ وَالْحِسَابِ).²⁹

Ibn al-Shikhnah says that the magician and astrologist mentioned in the hadith are the those who describe the Unseen or claim knowledge of the future. The statement of such a person will not be accepted, and approving these claims will constitute an act of disbelief. However, calculations of the [phases of the] moon have nothing to do with that. They are based upon precise data and are not fortune-telling or anything connected with the Unseen. Do not you see what Allah says in the Qur'an? "He prescribed for [the moon] computed stages so that you can learn about the numbers of years and the calculation."

Taqi al-Din 'Ali ibn 'Abd al-Kafi al-Subki explains this hadith:

وَلَا يَعْتَقَدُ أَنَّ الشَّرْعَ أَبْطَلَ الْعَمَلَ بِمَا يَقُولُهُ الْحِسَابُ مُطْلَقًا فَلَمْ يَأْتِ ذَلِكَ، وَكَيْفَ وَالْحِسَابُ مُعْمُولٌ بِهِ فِي الْفَرَائِضِ وَغَيْرِهَا، وَقَدْ ذُكِرَ فِي الْحَدِيثِ الْكِتَابَةُ وَالْحِسَابُ، وَلَيْسَتْ الْكِتَابَةُ مَنَهِيًّا عَنْهَا فَكَذَلِكَ الْحِسَابُ.³⁰

It cannot be that the Shari'ah has categorically prohibited the usage of astronomical calculations. That is not so. How could this be when calculations are being used for the obligatory as well as other matters [of *dīn*]? The oft-quoted hadith mentions writing and calculations. When writing is not forbidden, how could astronomical calculations be [forbidden]?

Regarding the hardship argument, it must be noted that we now live in a "global village." In this age of instant communication, news is broadcast world-wide within seconds. Thus the argument of hardship leveled by al-Nawawi and others loses its ground. In reality it is the other way round, as

Yusuf al-Qaradawi rightly contends.³¹ Muslims all over the globe and especially in the West suffer much hardship due to uncertainties connected with naked-eye sighting. Some of them wait until midnight just to start their *tarāwīḥ* prayers or decide about their 'Id prayers. Muslim employees and students also face many hardships. Therefore, depending upon naked-eye sighting instead of calculations has itself become the source of hardship.

It is also a fact that calculations and their usage in matters of *dīn* and *'ibādah* are nothing new, for calculations have been used for quite some time to determine the time for the prayers, as well as for *saḥūr*, *ifṭār*, and also the direction of the qiblah. Throughout Islamic history, all jurists have not only accepted such practices but have also required Muslims to learn about them.

قَسَمَ الْفُقَهَاءُ عِلْمَ النُّجُومِ إِلَى قِسْمَيْنِ: الْأَوَّلُ: حِسَابِيٌّ: وَهُوَ تَحْدِيدُ أَوَائِلِ الشُّهُورِ بِحِسَابِ سَيْرِ النُّجُومِ. وَيُسَمَّى مَنْ يُمَارِسُ ذَلِكَ الْمُنَحَّمِ بِالْحِسَابِ. وَلَا خِلَافَ بَيْنَ الْفُقَهَاءِ فِي جَوَازِ مُمَارَسَةِ التَّجْوِيزِ بِهَذَا الْمَعْنَى، وَتَعَلَّمَ مَا يُعْرَفُ بِمَوَاقِيتِ الصَّلَاةِ وَالْقِبْلَةِ، بَلْ ذَهَبَ جُمْهُورُهُمْ إِلَى أَنَّ ذَلِكَ فَرَضٌ كَفَائِيٌّ. وَجَاءَ فِي حَاشِيَةِ ابْنِ عَابِدِينَ: وَالْحِسَابِيُّ حَقٌّ، وَقَدْ نَطَقَ بِهِ الْكِتَابُ فِي قَوْلِ الْحَقِّ تَبَارَكَ وَتَعَالَى: (الشَّمْسُ وَالْقَمَرُ بِحُسْبَانٍ). وَأَجَازَ الْفُقَهَاءُ الْإِعْتِمَادَ عَلَيْهِ فِي دُخُولِ أَوْقَاتِ الصَّلَاةِ وَتَحْدِيدِ جِهَةِ الْقِبْلَةِ وَقَالُوا: إِنَّ حِسَابَ الْأَهْلِةِ، وَالْحُسُوفِ وَالْكَسُوفِ قَطْعِيٌّ، فَاللَّهُ سُبْحَانَهُ وَتَعَالَى أَجْرَى حَرَكَاتِ الْأَفْلَاكِ وَأَنْتِقَالَاتِ الْكَوَاكِبِ عَلَى نِظَامٍ وَاحِدٍ دَائِمٍ، وَكَذَلِكَ الْفُصُولُ الْإِزْبَعَةُ. وَالْعَوَائِدُ إِذَا اسْتَمَرَّتْ أَفَادَتْ الْقَطْعَ، فَيُنْبَغِي الْإِعْتِمَادُ عَلَيْهِ فِي أَوْقَاتِ الصَّلَاةِ وَنَحْوِهَا، وَفِي جِهَةِ الْقِبْلَةِ.³²

Jurists have divided the knowledge of stars into two categories. First is the calculation of celestial bodies and their movements to determine the beginning of the months. The person who practices this kind of astronomy is called an astronomer. There is no disagreement among jurists that this exercise is permitted. It is permitted to learn this science in an effort to know the times of the prayers and the directions of the qiblah. Indeed, the majority of jurists (*jumhūr*) opine that this knowledge must be acquired by a number of Muslims at all times. Ibn 'Abidin, in his *Hāshiyah*, says that "astronomical calculations are Islamically approved." This is exactly what the Qur'an says: "The sun and the moon follow meticulous calculations." Jurists have allowed the dependence on calculations concerning the times of the daily prayers as well as the directions of the qiblah. Astronomical calculations connected with new moons and lunar and solar eclipses are correct. Almighty God has fixed a system for the celestial bodies, and they always follow that system fully. The same principle applies to the four seasons. The aspects of nature that are continually repeating themselves are categorical in nature. Therefore, they should be relied upon in the matters of the prayer times as well as the direction of the qiblah.

Ahmad ibn Muhammad al-Hamwi stated the same opinion:

وَأَمَّا مَجْرَدُ الْحِسَابِ بِمِثْلِ ظُهُورِ الْهَلَالِ فِي الْيَوْمِ الْفُلَانِيِّ وَوُقُوعِ الْخُسُوفِ اللَّيْلَةِ الْفُلَانِيَّةِ فَإِنَّهَا
أُمُورٌ حِسَابِيَّةٌ مَبْنِيَّةٌ عَلَى أَرْصَادٍ وَإِقَاعَةٍ فَلَا تَدْخُلُ فِي نَهْيِ النَّبِيِّ صَلَّى اللَّهُ تَعَالَى عَلَيْهِ وَسَلَّمَ، وَيُؤَيِّدُهُ
مَا يَجُوزُ لَهُ مِنْ تَعْلِيمِ قَدْرِ مَا تُعَلِّمُ بِهِ مَوَاقِيتُ الصَّلَاةِ وَالْقِبْلَةِ.³³

Calculations relating to new moons and eclipses are based upon actual realities and experiments. They do not come under the category of acts prohibited by the Prophet. This argument is substantiated by the fact that jurists have allowed the knowledge of calculations when it comes to knowing the times of the daily prayers and the direction of the qiblah.

How could it be that jurists who declare knowledge of calculations as obligatory (*farḍ kifāyah*) for determining the time of the obligatory prayers rule that it is totally un-Islamic in regard to fasting Ramadan? That is why Mustafā al-Zarqa is amazed that many contemporary conservative jurist adamantly reject calculations the latter instance even though they use them in the former – especially since the daily prayers are far more important and frequent than fasting Ramadan. Classical jurists were right to oppose calculations, for the methods available at their time had not reached the level of authenticity and certainty that we presently enjoy. How could they have based important acts of worship upon calculations that were not completely precise and accurate? Are we going to drag their opposition to calculations into our own time, a time in which the underlying reasons for their opposition is no longer valid? Obviously, if the cause is no longer present then the effect must also cease to exist.³⁴

HAMZA YUSUF AND ASTRONOMY

Hamza Yusuf argues that astronomy had already become developed during the early Muslim centuries and that

the early Muslims were masters of observational astronomy and far superior in their observations than modern astronomers, who do almost all of their work in theoretical abstractions and mathematics, and are largely uninterested in actual physical observation of objects and events that are discernable to the unaided naked-eye, especially since the ancients have completed that work, and there is little left to be explored.³⁵

In addition:

Many modern Muslims, even those highly educated, believe there has been great advancement in observational astronomy. The telescope has undeniably enabled modern man to penetrate the heavens in unimaginable ways, and to understand

elliptical cycles of the moons and planets as well as the development of calculus. However, naked-eye astronomy has changed very little. In fact, the reality remains that the observed motion of the sun, moon, planets, and stars is far less understood to the common man as well as most astronomers than to pre-modern people...³⁶

He quotes al-Qarrafi as a scholar of astronomy and as one who believed that astronomy was decisive.³⁷

I do not deny that Muslim scientists played a major role in developing many medieval sciences. But it has been proven that medieval astronomy was based upon some incorrect wrong principles, such as geo-centrism instead of solo-centrism. Al-Qarrafi is a good example of what I am arguing here, for he states that astronomical calculations made according to conjunctions are precise and decisive. At the same time, however, he mentions the names of the seven planets known at his time: Saturn, Jupiter, Mars, the sun, Venus, Mercury, and the moon. This is sufficient to refute the assertion that the observational astronomy used by the early Muslim scientists was far superior to modern astronomy, given that we now know that

nine major planets are currently known. They are commonly divided into two groups: the inner planets (Mercury, Venus, Earth, and Mars) and the outer planets (Jupiter, Saturn, Uranus, and Neptune). The inner planets are small and are composed primarily of rock and iron. The outer planets are much larger and consist mainly of hydrogen, helium, and ice. Pluto does not belong to either group, and there is an ongoing debate as to whether Pluto should be categorized as a major planet.³⁸

In addition, there are many satellites, asteroids, and comets, as well as interplanetary dust and gas, that also move around the sun. Al-Qarrafi's clarification that there are only seven moving planets tells the whole story.

The true context of what Hamza Yusuf has quoted from al-Qarrafi's³⁹ *Al-Furuq* is that the imam, in these statements, is responding to those who had criticized him as being inconsistent.⁴⁰ They contended that sighting the sun's movement in relation to the daily prayers was just as obligatory as sighting the moon for fasting Ramadan. The authentic prophetic hadiths require sighting in both cases. But why did al-Qarrafi differentiate between the two required sightings (allowing calculations to determine the prayer times, instead of sighting the sun's movement, but denying their use to determine Ramadan)? He answered by stating that the mandatory legal cause of confirming the prayer time was to attain certainty about the arrival of the specific prayer's actual time. It was perfectly acceptable to achieve that certainty by any means other than actual sighting of the sun's movements. On the other hand, naked-eye sighting of the new moon was required as a legal cause of Ramadan. The imam states:

(فَإِنْ قُلْتَ) هَذَا مُنْجُوْحٌ مِنْكَ إِلَى أَنَّهُ لَا بُدَّ مِنَ الرُّؤْيَةِ، وَأَنْتَ قَدْ فَرَّقْتَ بَيْنَ الْبَابَيْنِ، وَمَيَّزْتَ بَيْنَ الْقَاعِدَتَيْنِ بِالرُّؤْيَةِ وَعَدَمِهَا، وَقُلْتَ السَّبَبُ فِي الْإِهْلَةِ الرُّؤْيَةُ وَفِي أَوْقَاتِ الصَّلَوَاتِ تَحْقِيقُ الْوَقْتِ دُونَ رُؤْيِيهِ فَحَيْثُ اشْتَرَطْتَ الرُّؤْيَةَ فَقَدْ أَبْطَلْتَ مَا ذَكَرْتَهُ مِنَ الْفَرْقِ.

قُلْتَ سُؤَالَ حَسَنٍ (وَالْحَوَابُ عَنْهُ) أَنِّي لَمْ أَشْتَرِطِ الرُّؤْيَةَ فِي أَوْقَاتِ الصَّلَوَاتِ لِكَيْ جَعَلْتُ عَدَمَ إِطْلَاعِ الْحِسِّ عَلَى عَدَمِ الْفَجْرِ دَلِيلًا عَلَى عَدَمِهِ وَأَنَّهُ فِي نَفْسِهِ لَمْ يَتَحَقَّقْ؛ لِأَنَّ الرُّؤْيَةَ هِيَ السَّبَبُ وَنَظِيرُهُ فِي الْإِهْلَةِ لَوْ كَانَتْ السَّمَاءُ مُصْحِيَةً وَالْجَمْعُ ثَبْرًا وَلَمْ يَزَلِ الْهَيْلَالُ جَعَلْتُ ذَلِكَ دَلِيلًا عَلَى عَدَمِ حُلُوصِ الْهَيْلَالِ مِنْ شُعَاعِ الشَّمْسِ.⁴¹

If you say that [by the example you presented] you are leaning toward the fact that sighting [the sun] is required [for prayer timings], you have already differentiated between the two scenarios and the two foundational rules by requiring actual sighting in one scenario [Ramadan] and not in the other [prayer timings]. You maintain that the cause [of fasting] in connection with the moons is actual sighting, while the cause of prayer timings is certainly about arrival of the prayer time without actual sighting [of the sun]. Therefore, when you require actual sighting regarding the moon, you [in reality] nullify the claimed difference between the two.

Al-Qarafi seems to be stating here that naked-eye sighting is the legal cause of starting Ramadan on the evening of 29 Sha‘ban. It is impossible to prove that the Lawgiver has ever required naked-eye sighting on 30 Sha‘ban. In addition, there is no legal requirement for naked-eye sighting if the skies are cloudy. Therefore, naked-eye sighting may be accepted as a legally binding cause of starting to fast after 29 Sha‘ban. The cause and the effect always go hand in hand, but this is not true as regards naked-eye sighting and fasting Ramadan. Al-Shatibi has stated:

ما أثبت سبباً، فهو سبب أبداً لا يرتفع...⁴²

The established [legal] cause always remains the cause and never changes.

DEFINING THE ISLAMIC LEGAL CAUSE

‘Abd al-Karim Zaydan defines the legal cause (*al-sabab al-shar‘ī*) as follows:

ما جعله الشارع معرّفًا لحكم شرعي، بحيث يوجد هذا الحكم عند وجوده و ينعدم عند عدمه.⁴³

The cause is what the Lawgiver has established in order to define the legal ruling in such a way that this specific ruling exists with its existence and disappears with its absence.

How could naked-eye sighting be the sole binding legal cause of fasting if Ramadan could begin by sighting, completion of thirty days, or mere estimation? It seems that many jurists who have insisted upon naked-eye sighting as the sole legal cause for fasting have confused *al-ḥukm al-taklīfī* and *al-ḥukm al-waḍʿī*. In Islamic jurisprudence, the former denotes a divinely commissioned ruling that requires Muslims either to act or not to act upon a demand, or it gives them a choice either to perform or not to perform an act. This kind of *ḥukm* includes almost all of the various categories of acts: mandatory, recommended, permitted, disliked, and prohibited.

وهو ما يقتضي طلب الفعل، أو الكف عنه، أو التخيير بين فعله وتركه، وهو يشمل الوجوب والاستحباب والإباحة والكراهة والتحریم، ومن أمثلة ذلك وجوب الصلاة.⁴⁴

(*Al-ḥukm al-taklīfī*) is a divine command that requires an action or prohibits it, or gives a choice between performing or abandoning it. It includes the mandatory, recommended, permitted, disliked, and prohibited acts. The example of (*al-ḥukm al-taklīfī*) is the requirement of the daily prayers.

On the other hand, the positional or positivistic divine command (*al-ḥukm al-waḍʿī*) is situational in nature. It identifies the cause, condition, or the reason for the prohibition of a ruling or a specific practice. Moreover, it is just a description of a specific ruling and not a demand from the Lawgiver to perform or abandon an act. For instance, noon is a cause of performing *zuhr* and theft results in a mandatory punishment. If there is no theft, there is no punishment. In other words, the existence of that particular *ḥukm waḍʿī* does not mean that the Lawgiver requires stealing.

الحكم الشرعي الوضعي: وهو ما يقتضي جعل شيء سبباً لشيء، أو شرطاً له، أو مانعاً منه، وهو بالتالي ليس فيه أي طلب من المكلف بفعل أو ترك، بل هو بيان من الشارع مثل: اعتبار زوال الشمس سبباً لوجوب الصلاة، أو اعتبار السرقة سبباً لوجوب الحد.⁴⁵

(*Al-ḥukm waḍʿī*) is what requires one thing as a cause or condition for something else or negates such a condition. Consequently, it does not contain any demand for an action or non action by a believer. It constitutes the Lawgiver's explanation (for a specific ruling), for instance (His) considering noon as the cause of requiring the (*zuhr*) prayer or considering theft as cause of capital punishment.

Therefore, the *ḥukm al-taklīfī* is “fasting Ramadan” and the *ḥukm al-waḍʿī* is “witnessing Ramadan.” Naked-eye sighting in the past was just a means to determine the act of witnessing; it was neither the objective nor

cause in itself. As seen earlier, the established legal causes do not change, for they are constants.

Al-Nawawi states that fasting Ramadan is connected with the timing of [the entrance, coming of] Ramadan.

ولا يجب صوم رمضان إلا بدخوله ويعلم دخوله برؤية...⁴⁶

Fasting Ramadan does not become obligatory until the month arrives, and the arrival is known by sighting the new moon.

Ibn ‘Abd al-Barr has stated the point very neatly:

God says, “Whoever witnesses the month should fast” (2:185). He means, and God knows best, “Whoever among you knows, *with a knowledge that is certain*, that the month has indeed begun must fast it.” Knowledge that is certain is [based on] either a clear and widespread sound sighting or the completion of thirty days of the previous month.⁴⁷

From these classical quotations, Faysal Mowlawi draws the logical conclusion that the coming of Ramadan makes fasting obligatory and that witnessing the month ascertains that coming of Ramadan. Therefore, witnessing the month is the real cause and not the sighting, because the “witnessing” takes place both with and without sighting, as Al-Razi states:

أن شهود الشهر بماذا يحصل؟ فنقول: إما بالرؤية وإما بالسمع.⁴⁸

How is witnessing the month accomplished? We say that it is achieved either by physical sighting or by hearing.

Thus sighting is just one of the means (*waṣīlah*) to determine Ramadan’s arrival; it is not the legal cause (*sabab*) of fasting. Mowlawi, who differentiates between a cause (*sabab*) and a condition (*‘illah*), concludes:

ومعنى ذلك أنّ دخول رمضان هو سبب وجوب الصيام، وأنّ رؤية الهلال هي وسيلة العلم بدخوله.⁴⁹

It means that the coming of the month of Ramadan is the cause of fasting Ramadan and that the sighting of the moon is a method of knowing that coming [of Ramadan].⁵⁰

Furthermore, it is quite challenging to describe sighting the moon as the legal cause of fasting and then explain why the Lawgiver specified it as a cause only for 29 Sha‘ban and not for the following day, or why He gave the options of sighting, completion, or estimation. On the other hand, if we con-

firm that the objective of certainty about the Ramadan's arrival as the real reason for the prophetic insistence upon naked-eye sighting on 29 Sha'ban, then we can fully understand why He did not require it on the evening of 30 Sha'ban (to confirm the fasting of Ramadan). It is also quite important to understand this specific prophetic insistence within the context of the real challenges and confusion caused by arbitrary intercalations.

Rashid Rida, Mustafa al-Zarqa, Ahmad Shakir, and many others have highlighted the fact that the Lawgiver allowed naked-eye sighting only as a means to determine such fixed sacred times as Ramadan, not to worship the act of sighting in itself. The Prophet connected both naked-eye sighting and completion due to the wide-spread illiteracy, for the objective of his prophethood was to educate the Ummah, not to push it further into illiteracy.

Moreover, there is no *ijma'* (agreement or consensus) among the jurists that naked-eye sighting is the only cause of fasting Ramadan, although many classical jurists emphasized it as the legal cause of confirming Ramadan. The real cause, as stated in the Qur'an, is "witnessing the month." This can be done through naked-eye sighting as well as other means of knowledge about Ramadan. Many jurists have stated this fact. For instance, Muhammad Ahmad Mustafa Ahmad Abi Zahrah states that the cause of fasting is the month of Ramadan.

⁵¹(الشهر هو إِمارة على وجوب الصوم).

The month [of Ramadan] is the cause/sign of the obligation of fasting.

‘Abd Allah ibn al-Juday’ states that it is the coming of Ramadan.

(دخول الشهر لوجوب صوم رمضان) أخذاً من قوله تعالى (فمن شهد منكم الشهر فليصمه...) ⁵²(سورة البقرة: 185).

The Qur'anic verse "whoever witnessed the month should fast" makes the arrival of the month the cause of obligatory fasting during Ramadan.

‘Abd al-Karim Zaydan also states that the legal cause of fasting is the coming of the month.

⁵³أمثلة السبب الشرعي (دلوك الشمس لوجوب الصلاة، وشهر رمضان لوجوب الصيام).

Examples of legal cause are sunset [is the cause] for prayer obligation and the month of Ramadan for obligatory fasting.

That is why it is important that we understand al-Qarrafi's statements about naked-eye sighting of the moon as the sole legal cause of fasting and also sighting the sun in regard to the prayer times in light of the imam's dialogue with his opponents. It cannot be denied that he, like many other classical jurists, maintained that naked-eye sighting was the legal cause of fasting Ramadan. What is being denied here is that his verdict on this issue is relative to his milieu; it was not absolute that it must be applied forever. As seen above, he disagreed with the established authorities of almost all of the legal schools of thought by negating the unity of horizons and affirming their variety. Early jurists declared that the unity of horizons was the legal binding cause of the month of Ramadan. Modern jurists are following in his footsteps by disagreeing with his claim that naked-eye sighting is the sole legal cause of fasting. In fact, the sole legal cause of fasting is witnessing the month, and naked-eye sighting is just one of the means to achieve that goal. We should keep this point in mind when analyzing the classical juristic positions on naked-eye sighting.